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# UNRAVELING FINANCIAL STATEMENTS OF CO-OP GINS

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Directors, managers, and members of cooperative gins should be able to interpret financial statements if they are to understand fully the financial organization of their association. Although it is not essential that they know the routine mechanics of bookkeeping, some knowledge of the effects of business transactions on the different accounts in their books will contribute toward a more complete understanding of their association.

The two most important financial statements are: (1) The balance sheet and (2) the operating statement. A balance sheet is always as of a given date; an operating statement is always for a given period. These statements have been described as pictures of a business: The balance sheet an instantaneous photograph; the operating statement a moving picture.

The balance sheet is a statement as of a given date that shows the assets (what the association owns), the liabilities (what the association owes), and the net worth (equities of the stockholders or members). A balance sheet is so-called because the assets are equal to, or balance the sum of the liabilities and net worth. Stated another way, net worth is the difference between what the business owns and what it owes.

The operating statement shows a summary of those business transactions made during a given period that affect income and expenses. Income and expenses are not necessarily the same as cash receipts and disbursements. Some business transactions do not affect either income or expense even though cash may be received or paid out. On the other hand, income may be realized or expenses incurred without the receipt or expenditure of cash.

## RELATION OF BOOKS TO FINANCIAL STATEMENTS

It is possible to prepare a balance sheet without keeping a complete set of books if the assets and liabilities are few and within

NOTE.-The author resigned from the Cooperative Research and Service Division September 30, 1940, to accept a position with the Cooperative Research and Experiment Division of the Tennessee Valley Authority.

range where they can be readily seen and correctly inventoried. For example, you may be able to make out your own personal balance sheet even though you may not keep any permanent records. First, make a list showing the value of everything you own; second, make another list of every obligation you owe to others; and third, subtract the total of things owed from the total owned. This difference between your assets and liabilities is your net worth -- the net amount that you are worth financially after allowing for what you owe others. Such a statement is a simple type of balance sheet.

As an illustration, assume:

(1) That you own:

| | | |
|---|---|---|
| Cash______________ | $ 400 | |
| Amounts owed to you by others________ | 100 | |
| Livestock, tools, and equipment valued at | 1,500 | |
| A farm with improvements valued at___ | 12,000 | |
| Total_________ | | $14,000 |

(2) That you owe others:

| | | |
|---|---|---|
| Short-term notes and accounts_________ | $1,000 | |
| Land mortgage______ | 5,000 | |
| Total_________ | | $ 6,000 |

(3) Your net worth would be the difference, or___________ $ 8,000

Although a balance sheet prepared in this manner may be satisfactory in the case of some individuals, it is usually impractical, if not impossible, for a cooperative association to prepare accurate financial statements without keeping a rather complete set of books. The business transactions of even the smallest association are too varied and numerous to be memorized. Moreover, a cooperative association needs more information than the amount of its net worth. A complete set of books will provide, not only a continuous record of net worth items, but of assets and liabilities as well, and in addition will show the amount of all income, costs, and expenses. It is true that a balance sheet prepared from a set of books does show that the assets minus the liabilities equals net worth, but this equality only indicates that the books are mathematically accurate, and is not a means of determining net worth.

A balance sheet that is made up from the information furnished by an accurate and complete set of books balances as a result of the procedure followed in double-entry bookkeeping. The money value of each business transaction is always recorded in the books in at least two accounts. One or more accounts are said to be "debited" and one or more other accounts "credited" in recording each business transaction. The practical meaning of "debit" is "left" and of "credit" is "right," in that these terms designate the left and right sides of the accounts or pages of the books. The money value of each transaction is recorded on the left side of one or more accounts, and also on the right side of one or more other accounts.

As successive transactions are recorded in the books, the difference between the total debit entries and the total credit entries in each ledger account is known as the "balance" of that account. If the sum of the amounts recorded on the left side of any one account is greater than the sum of the amounts recorded on the right side of that account, it is said to have a debit balance. If the opposite is true, the account has a credit balance. The balances of the accounts in the books are the figures that appear on financial statements.

## DEVELOPMENT OF A BALANCE SHEET

Some of the characteristics of a balance sheet may be explained by an illustration showing changes that take place as successive business transactions are made. Assume that a group of cotton farmers decide to organize a cooperative gin. By the time the association is incorporated, the members as a group have subscribed and paid for $10,000 of the association's capital. For purposes of this illustration it is immaterial whether this capital investment of members is recognized by issuing to them some kind of stock or other certificates, or only by keeping a record of the amount of money paid in by each member.

A balance sheet of the association at this time would show:

BALANCE SHEET
(Date)

| ASSETS | | LIABILITIES | None |
|---|---|---|---|
| | | NET WORTH | |
| Cash | $10,000 | Invested Capital | $10,000 |

The arrangement of the assets on the left side of the page and the investment of members on the right in the above balance sheet reflects the debit and credit balances of these accounts as they appear in the books. In a balance sheet, assets are accounts that have debit balances, while liability and generally net worth accounts are those with credit balances. The above balance sheet shows that the association owns $10,000 and that it is responsible to its members for $10,000.

The association then decides to borrow $15,000 in order to have enough money to pay cash for a gin plant. When this amount of money has been borrowed and the transaction recorded in the books, the balance sheet of the association will be as follows:

BALANCE SHEET
(Date)

| ASSETS | | LIABILITIES | |
|---|---|---|---|
| Cash | $25,000 | Notes Payable | $15,000 |
| | | NET WORTH | |
| | | Invested Capital | 10,000 |
| Total | $25,000 | Total | $25,000 |

Two different groups -- creditors and members -- now have a claim on the assets of the association. One distinction between the claims of two different groups is that the claims of creditors are prior to those of members and must be repaid at a specified date, while the net worth claims of members are not intended or expected to be paid back to them except on dissolution of the association, or according to some prearranged plan such as a revolving method of financing.

In a legal sense the cooperative association, in the above illustration, and not the members as individuals, owes the $15,000 liability and owns the $25,000 assets. Although the members do own the association, the creditors have a prior claim to the assets. A cooperative that is incorporated is legally a separate "person" from its members or stockholders. This explains the general rule of law that members or stockholders of an incorporated cooperative are not liable for its debts beyond their investment in or subscription to its capital.

To continue with the illustration, assume that the association buys a complete gin plant, paying $24,000 in cash. When this transaction has been recorded in the books, the resulting balance sheet will be as follows:

BALANCE SHEET
(Date)

| ASSETS | | LIABILITIES | |
|---|---|---|---|
| Cash | $ 1,000 | Notes Payable | $15,000 |
| Gin Plant | 24,000 | NET WORTH | |
| | | Invested Capital | 10,000 |
| Total | $25,000 | Total | $25,000 |

As shown by each of the above balance sheets, the total assets which the business has in its possession is equal to the sum of its liabilities and its net worth. For example, the last balance sheet above shows that assets of the association are now $1,000 cash and a $24,000 gin plant, or a total of $25,000. This is equal to the sum of its $15,000 liabilities and its $10,000 net worth. Stated another way: The $10,000 invested by the members (net worth) plus the $15,000 borrowed from creditors (liabilities) is accounted for by $1,000 in cash and a gin plant that cost $24,000. This latter viewpoint may be emphasized by reversing the usual order of the items and amounts shown in the previous balance sheet.

BALANCE SHEET
(Date)

To be accounted for:

| | |
|---|---|
| Invested in the association by members (net worth)_________ | $10,000 |
| Borrowed by the association from creditors (liabilities) | 15,000 |
| Total to account for____ | $25,000 |

Accounted for as follows: (Assets)

| | |
|---|---|
| Cash_____________________ | $ 1,000 |
| Gin Plant________________ | 24,000 |
| Total accounted for_____ | $25,000 |

A balance sheet arranged in this reverse order may be more easily understood as it follows somewhat the sequence of transactions that have taken place. For example, the members first invested $10,000 in the association; second, the association borrowed an additional $15,000 from creditors; and third, the association bought a $24,000 gin plant, and still had $1,000 in cash.

## RELATION OF BALANCE SHEET TO OPERATING STATEMENT

All of the business transactions described in the above illustrations affected only the balance sheet accounts -- assets, liabilities, or net worth. Under practical conditions some expenses, no doubt, would have been incurred by the time the gin plant was bought. These would have appeared in the operating statement instead of in the balance sheet. Such expenses were purposely omitted from the illustration above in order to simplify the explanation of the initial steps in the development of the balance sheet. Although certain business transactions, such as those illustrated above, do affect only the balance sheet accounts, a large proportion of the business transactions made during the course of a year involve one or more operating accounts and one or more balance sheet accounts.

The operating statement and the balance sheet are two separate and distinct statements, although they are closely related. The net gain or loss for a given period, as shown by the operating statement, becomes one of the items of net worth in the balance sheet at the end of the period. In fact, all income represents increases in net worth, and all costs and expenses represent decreases.

In order to illustrate these points, assume now that the cooperative gin has operated for one year. It has charged prevailing commercial rates for ginning, and paid, or rather advanced, the competitive price for cottonseed. Its books have been audited and the following financial statements prepared and submitted to the board of directors for their decision as to disposition of the net income.

Although somewhat condensed and simplified, these two financial statements do not differ materially from those of typical cooperative gins. In order to emphasize the meaning of these statements and their real character, certain detailed items were purposely omitted from them as they would affect only their form or arrangement. For example, the above operating statement does not show the receipts from bagging and ties separate from ginning receipts; there is no mention of the expenses for handling cottonseed; and it gives only the total for all ginning expenses other than depreciation. Expense for depreciation is shown separately from other expenses in order to call special attention to its meaning in both the operating statement and the balance sheet. In the balance sheet, the cost of the gin plant is shown as one total, although this is generally separated into at least three accounts -- land, buildings, and gin machinery, with a separate allowance for depreciation on buildings and on machinery.

The operating statement considered alone does not give any indication of the amount of money that was received or paid out during the year. This statement would have been the same had both the $12,000 ginning charges and the $19,000 cottonseed sales been entirely on credit, and had all the expenses been unpaid at the end of the year. Most of this information, however, may be obtained from the balance sheet.

The operating statement shows that the members were originally charged $3,000 more for ginning and wrapping than it cost the association to provide these services. Likewise, the association received $1,000 more

## BALANCE SHEET

March 31, 1940

| | | |
|---|---|---|
| **ASSETS** | | |
| Current | | |
| Cash | $ 6,700 | |
| Accounts receivable | 400 | |
| Inventories (bagging and ties) | 300 | $ 7,400 |
| Fixed | | |
| Gin plant | 24,000 | |
| Less allowance for depreciation | 2,000 | 22,000 |
| Prepaid expenses (insurance) | | 200 |
| Total assets | | $29,600 |
| **LIABILITIES** | | |
| Current | | |
| Accounts payable | $ 500 | |
| Accrued expenses (one-half taxes) | 100 | 600 |
| Fixed | | |
| Notes payable | | 15,000 |
| Total | | $15,600 |
| **NET WORTH** | | |
| Invested capital | $10,000 | |
| Current year's income | 4,000 | |
| Total | | $14,000 |
| Total liabilities and net worth | | $29,600 |

## STATEMENT OF OPERATING RESULTS

April 1, 1939 to March 31, 1940

| | | |
|---|---|---|
| Receipts from ginning and wrapping 2,500 bales | | $15,000 |
| Ginning expenses: | | |
| Depreciation expense | $ 2,000 | |
| All other expenses | 10,000 | |
| Total | | $12,000 |
| Net income from ginning | | 3,000 |
| Cottonseed sales - 750 tons | $25,000 | |
| Less: Purchases (advances) | 24,000 | |
| Net income from cottonseed | | 1,000 |
| Total net income | | $ 4,000 |

from the sale of cottonseed than it originally paid, or rather advanced, to the members for this cottonseed. It follows then that the $4,000 total net income from ginning and cottonseed belongs to the members since it is the result of a temporary overcharge for ginning and a temporary underpayment for cottonseed.

Since none of the $4,000 net income had been distributed to the members, the association must now account to them for this $4,000, in addition to the original $10,000 which they originally invested in the association. Pending the distribution of this $4,000 net income to the members by action of the board of directors, it is, therefore, shown along with the $10,000 invested capital in the net worth section of the balance sheet.

Likewise, the association still owes the $15,000 that it borrowed to buy the gin plant, and in addition owes $500 in accounts payable and $100 in unpaid expenses. Therefore, the association must now account to its members and creditors for a total of $29,600. Obviously the asset section of the balance sheet shows the different items of property by which this $29,600 is represented.

The $400 in accounts receivable in the above balance sheet shows that this amount of the ginning charges or cottonseed sales had not been collected. The $300 inventory is the value of unused bagging and ties on hand at the end of the year. The $200 prepaid expense is for the unexpired portion of a 3-year premium on an insurance policy which will be in force for 2 more years. Although this insurance is valued at $200 in the balance sheet, it could not be converted into that amount of cash. It is, however, worth $200 to the association as a going concern.

In the liability section of the balance sheet the $500 accounts payable represents unpaid invoices for repair parts or other supplies. The $100 in accrued expenses is one-half of the past year's taxes. Although this tax payment may not be due for several months, its "use or benefit" has already been realized and the amount was therefore included in the expenses of the past season's operations. Since it is not paid, it is an obligation of the association, though not yet due, and is properly shown as one of the items which the association owes. Had there been any unpaid salaries, wages, rent, interest, or other items for which the benefits had already been realized, these would likewise have been shown as liabilities in the balance sheet similar to accrued taxes, and would also have been included as expenses in the operating statement.

## DEPRECIATION EXPENSE AND ALLOWANCE

Depreciation shows up in both the operating statement and the balance sheet. The $2,000 depreciation expense shown in the operating statement is not the result of an expenditure of that much money. It is a bookkeeping entry that was made to show an estimate of the amount by which the value of the gin plant was reduced as a result of having been used for 1 year. This $2,000 was added to the other expenses of operating the plant during the current season, and a like amount in effect deducted from the account showing the original cost of the gin plant. As a matter of bookkeeping procedure, the gin plant account is not reduced directly by the amount allowed for depreciation each year. Instead, another account, allowance for depreciation, is increased each year by the amount allowed for depreciation. These two accounts may be thought of as the left and right sides of the gin plant account. It is not necessary to show both the asset account and the allowance-for-depreciation account in the balance sheet. The difference between the two accounts -- the depreciated or book value of the gin plant -- may be shown instead as one total.

When it becomes necessary to replace a motor, cleaner, gin stand, or any other complete unit, or to replace the entire gin plant, the cost of the new unit is not an expense of that year's operations. Replacement costs, in effect, are deducted from the allowance previously made for depreciation. A bookkeeping adjustment in the accounts is necessary if the original cost of the asset being replaced has not been fully depreciated, or if the cost of the replacement is not the same as the asset being replaced.

Allowing for depreciation as an operating expense each year is a means of prorating the cost of the gin plant to operations during the number of years that the plant is

expected to be used. This procedure is necessary in order to arrive at a correct statement of net income each year. Since dividends are properly distributed only out of the net income of the current or previous year, such distributions should be limited to the amount of net income actually realized. Such policies with respect to the determination of net income and the distribution of dividends will prevent the assets of the association, which account for the investment of members and the loans of creditors, from being distributed erroneously as dividends.

Depreciation expense does not differ materially from other expenses except in the matter of time. For example, if it were necessary to buy enough fuel at one time to last for 10 years, and to pay for it in advance, only one-tenth of this cost would be considered an expense of operation each year. That is, the amount of fuel used each year would be charged off to the expenses of that year and credited to the fuel asset account. The amount of the unused fuel on hand at the end of each year would show up in the asset section of the balance sheet either as a prepaid expense or as an inventory of supplies. The original cost of the gin plant may be said to be a prepaid expense for ginning machinery and equipment that will be used up gradually over a period of years.

Paton's 1/ "Accountants' Handbook" makes the following comments with regard to depreciation:

> "The conventional depreciation reserve not only does not consist in an actual cash fund but can be said to represent or indicate a fund of property only in a very indirect way, if at all. The balance in the reserve or allowance for accrued depreciation represents just one thing - the estimated decline in value in use of the depreciable property shown in other accounts at cost or other gross book value. This can be emphasized by calling attention to the fact that it is quite possible to account for depreciation by avoiding the use of the reserve account entirely through the use of a procedure by which the credits are lodged directly in the plant accounts - an entirely clear-cut and accurate method. The really significant element in the accounting for depreciation is the setting up of the charge to operation, and finally to revenue, by which the showing of net profit is restricted below the figure which would appear if the depreciation were neglected, and as a result of which dividends are restricted to true net earnings and capital impairment avoided. On the other hand, where revenues are at least sufficient to cover all costs assets tend to be built up at least to the accumulated balances in the reserve account to take the place of expired values, assuming the funds replacing expired values are not utilized in retiring liabilities or otherwise reducing capital. * * * The depreciation reserve does not represent a specific fund of cash or other assets set aside to make good the depreciation; it rather expresses the estimated 'hole' in the assets subject to depreciation."

## DISPOSITION OF NET INCOME

From the information furnished by the operating statement and the balance sheet the board of directors will have the following decisions to make:

(1) How much of the $4,000 net income should the association withhold from distribution to members and retain in the association as a general reserve or surplus?

(2) How much should be declared as a dividend or interest on invested capital?

(3) How much should be declared as patronage dividends?

(4) Should all the patronage dividends be allocated on the basis of the number of

1/ Accountants' Handbook 2d ed., edited by W. A. Paton. 1934. 1,873 pp., illus. See pp. 621-623.

bales ginned, or should the amount of net income realized in handling cottonseed be allocated separately on the basis of tons sold or delivered to the association?

(5) Should dividends be distributed in cash or in some form of increased equity in the capital of the association?

According to the balance sheet the association has $6,700 and could distribute all of its $4,000 net income in cash. However, a $5,000 payment should perhaps be made on the $15,000 notes payable, and in addition the $500 accounts payable and the $100 accrued expenses are current obligations and should be paid. As these three items amount to $5,600, only $1,100 of the $6,700 cash on hand would be available for the payment of dividends.

In view of these conditions, assume that the directors decide to distribute the $4,000 net income in the following manner:

(1) As undivided general reserve of $400.

(2) A dividend of 6 percent, or $600, on the $10,000 invested capital, to be paid in cash, and

(3) The balance of $3,000 allocated to the members as a patronage dividend, and evidenced by individual book credits to the capital accounts of each member. As to the basis of allocating the $3,000 patronage dividends -- three-fourths or $2,250 is to be allocated on the number of bales ginned by each member, and one-fourth or $750 on the number of tons of cottonseed delivered by each one. 2/ This is in proportion to the amount of net income realized in the two departments.

The action of the board of directors in setting aside $400 or 10 percent of the net income as a general reserve does not mean that a cash fund of this amount is established. Such a reserve is a form of member capital which is usually undivided as to individual equities -- though not necessarily so -- and does not differ from paid-in capital as to the purpose for which used or the assets by which represented. This reserve capital along with invested capital, and that borrowed from creditors, is represented by all the assets which the association owns.

The purpose of a reserve such as this is to establish a form of capital that is subordinate to all other capital interests of members. In the event of a loss from operations or otherwise, the reserve would be wiped out before the other forms of invested capital are impaired. This would normally be true even though the financial interest of individual members in the general reserve had been determined and shown by the books.

Nearly all cooperative gins borrow some of the money required to buy a gin plant. This indebtedness is sometimes said to be paid out of the earnings of the association. This is not strictly true, as surplus or other net worth reserves and dividends of some character are the only uses that may be made of net income. If no specific distribution is made of net income it becomes some form of surplus or reserve and as such is a part of the capital of the association. This surplus or reserve capital may be used to acquire other assets, pay indebtedness, absorb deficits, or even retire other capital previously obtained. A cooperative gin that pays for its plant "entirely out of income" and makes no allocation of this equity to individual patrons, has all its capital in some form of an undivided reserve or surplus. Such capital, however, is just as real as that originally invested in cash by the members.

## FINANCIAL STATEMENTS FOR MEMBERSHIP MEETINGS

After the board of directors decides on the distribution of the $4,000 net income, complete financial statements may then be prepared for the annual meeting of the members. These statements should summarize the results of the year's operations, and show the association's financial condition at the end of the year. The operating statement should show not only the amount and sources of income, but also the disposition that was made of this income by action of the board of directors.

2/ The bylaws or statutes may require distribution of patronage earnings on the basis of amount of each member's patronage in dollars without regard to the character of the business.

The balance sheet should tell the members how much money they have invested in the cooperative, both in evidenced capital such as shares of stock and undivided capital such as reserves; the amounts for which the cooperative is obligated to creditors; and the different kinds of assets by which these two kinds of claims are represented. It is also desirable to place the previous year's balance sheet beside the balance sheet for the current year in order to show the changes that have taken place in assets, liabilities, and net worth.

Following is one method by which this information may be presented:

compared to the beginning of the year. This is reflected in the $400 general reserve, and the $3,000 individual book credits. In addition to this $3,400 increased equity of members, there was also a $1,200 increase in the amount due others (liabilities). Therefore, the association must now account to the members for $4,600 more, or a total of $29,600, in addition to the $25,000 for which it had to account at the beginning of the year. This amount is, of course, represented by the $29,600 assets.

All the assets increased as compared to the beginning of the year except the gin plant. It declined or depreciated in value an estimated $2,000 as a result of one year's obsolescence and wear. All other assets combined increased a total of $6,600 leaving a net increase, above the $2,000 decline in the value of the gin plant, of $4,600 or the same amount as the combined increase in liabilities and net worth mentioned above.

COMPARATIVE BALANCE SHEETS

| | MARCH 31, 1939 | MARCH 31, 1940 | INCREASE OR DECREASE |
|---|---|---|---|
| Owned by association (assets): | | | |
| Cash | $ 1,000 | $ 6,700 | + $5,700 |
| Unpaid accounts due us | None | 400 | + 400 |
| Supplies on hand | None | 300 | + 300 |
| Gin plant -- less depreciation | 24,000 | 22,000 | - 2,000 |
| Insurance paid in advance | None | 200 | + 200 |
| Total owned | $25,000 | $29,600 | + $4,600 |
| Owed to others (liabilities): | | | |
| Unpaid accounts due others | None | $ 500 | + $ 500 |
| Dividends on capital | None | 600 | + 600 |
| Unpaid expenses | None | 100 | + 100 |
| Notes payable | $15,000 | 15,000 | None |
| Total | $15,000 | $16,200 | + $1,200 |
| Invested by members (net worth): | | | |
| Invested capital | $10,000 | $10,000 | None |
| Individual book credits | None | 3,000 | + $3,000 |
| Undivided general reserve | None | 400 | + 400 |
| Total | $10,000 | $13,400 | + $3,400 |
| Total invested and owed | $25,000 | $29,600 | + $4,600 |

COMPARATIVE BALANCE SHEETS

The net results of the season's operations appear in the differences between the balance sheet at the beginning and end of the year. For example, the net worth, or the investment of members, was increased $3,400 as

## OPERATING STATEMENT

For Membership Meeting

April 1, 1939 to March 31, 1940

| | |
|---|---|
| 1. Sources and amount of net income: | |
| Ginning and wrapping 2,500 bales | $ 3,000 |
| Handling 750 tons of cottonseed | 1,000 |
| Total net income | $ 4,000 |
| 2. Disposition of net income: | |
| Undivided general reserve kept by cooperative | $ 400 |
| 6 percent cash dividend on $10,000 capital | 600 |
| Patronage dividend in member's equities | 3,000 |
| Total net income distributed | $ 4,000 |
| 3. Patronage dividend per unit and total, above reserves and dividend on capital: | |
| Ginning and wrapping 2,500 bales @ $0.90 per bale | $ 2,250 |
| Cottonseed, 750 tons @ $1.00 per ton | 750 |
| Total patronage dividends | $ 3,000 |
| 4. Result of year's operation from member's standpoint: | |
| Ginning and wrapping: | |
| He paid an average per bale of - | $ 6.00 |
| Less patronage dividend per bale of - | .90 |
| His ginning and wrapping cost per bale | $ 5.10 |
| Cottonseed: | |
| He received an initial average advance per ton of - | $32.00 |
| Add patronage dividend per ton of - | 1.00 |
| He actually received per ton | $33.00 |

### OPERATING STATEMENT

The operating statement illustrated above is suggested only for use at the annual membership meeting. Although every member has a right to know all the details of his association, it is usually not practical to present more than a summary of such information at the annual membership meeting. A few significant figures usually are preferable to column after column of figures that are confusing because there are entirely too many to remember. It is, of course, desirable that complete and detailed financial statements be furnished each member, or at least be available for their inspection.

All four sections of the suggested operating statement are related, although each one is separate and independent. Section 1 shows the sources and amount of net income. Section 2 indicates the three ways in which the net income was distributed and the manner in which payment is to be made. In section 3 the amount of patronage dividend for each department of the business is given, after deductions have been made from net income to provide for the general reserve, and for dividends on invested capital. Section 4 shows the net results of the gin's operations from the standpoint of the member. This type of information deserves more emphasis in cooperative gins than it is usually given. The initial ginning rate paid by the member, and the amount paid or rather advanced to him for cottonseed at the time of ginning, is important only in relation to the amount of patronage dividends received. A small patronage dividend and a low ginning rate may be just

as much as a large patronage return when the ginning rate is correspondingly high. For this reason cooperative gins should at least maintain prevailing rates, or even charge higher rates than competitors if the competitive rate is too low to provide for all operating expenses. It is much easier and more pleasant to distribute a patronage dividend than it is to assess and collect undercharges or overpayments.

## NET WORTH ITEMS

The net worth section of the balance sheet at the end of the year has the following three items:

| | |
|---|---|
| Invested capital | $10,000 |
| Individual book credits | 3,000 |
| General reserve | 400 |
| Total net worth | $13,400 |

This $13,400 total represents the combined financial interest of all members in the association. The financial interest of individual members in each of these three forms of capital is not necessarily in the same proportion. Each member's share in the $10,000 invested capital is the amount of money which he invested. Each member's share in the $3,000 individual book credits is the amount of money each one would have received had the patronage dividends been distributed in cash. The $400 general reserve may or may not be identified as to the pro rata interest of each member. In some cooperatives this form of capital is entirely undivided; in others the amount of each member's interest is determined and shown in the books; and in others subject to determination on some basis of patronage. An association's articles of incorporation and bylaws usually have some provisions with respect to the financial interest of members in net worth reserves.

Two or more kinds of capital usually indicate different degrees of preference against losses from operations or otherwise, and in liquidation the preference rights and claims of different classes of capital against losses and in liquidation are usually stated in an association's articles of incorporation and bylaws. In some instances these preferences are indicated in the cooperative statutes. Assume, for purposes of this illustration, that the preference rights of the three classes of capital are in the order in which they are listed above, and the association operates the following year at a loss of $4,000. Under these conditions the $400 general reserve would be wiped out first, the $3,000 individual book credits next, with only $600 of the loss impairing the issued value of the $10,000 invested capital.

The preference rights and claims of the different classes of capital may also be explained by the order in which the interests of members in net worth items would be retired in the event the cooperative should liquidate. Although it is somewhat theoretical to assume that a successful cooperative will cease operations, sell its assets, pay off its creditors, and distribute its net worth to its owners, it may be helpful in understanding the capital structure to make such an assumption. For example, if this cooperative should sell all its assets at the $29,600 book value, it could pay the $16,200 owed to creditors and still have $13,400, or enough to retire all three types of financial claims of its members. On the other hand, if the total assets sold for only $27,200, there would be only $11,000 to distribute to members after paying the $16,200 due creditors. Assuming again that the individual book credits did not have preference over the invested capital by statute, articles of incorporation, bylaws, or by action of the board of directors, the $10,000 invested capital would be retired first at the issued value, leaving only $1,000, or thirty cents on the dollar, to pay on the $3,000 individual book credits, and nothing for distribution to members for their interests in the $400 general reserve.

## TRANSACTIONS THAT AFFECT THE BALANCE SHEET

The balance sheet may be further explained by showing the effect of certain transactions on some of the accounts. If the $400 accounts receivable, in the illustration on p. 5, were collected, the only two accounts that would be affected would be cash and accounts receivable. The cash account would be increased from $6,700 to $7,100; accounts receivable would be reduced $400 and thereby

disappear from the statement. The general reserve account (surplus) would not be affected. Should the association then pay $5,000 on its notes payable, the two accounts affected would be cash and notes payable. Cash on hand would be decreased from $7,100 to $2,100 and notes payable reduced to $10,000. Similarly, if the $500 accounts payable and the $600 dividends payable were paid, these two accounts would be wiped out and the cash account further reduced to $1,000. Again, these transactions would not affect the general reserve account, or the amount of net income.

Since the association would still have $1,000 in cash, it could pay one-third of the $3,000 individual book credits in cash. However, this would leave the association without any cash funds to make repairs during the summer, and begin operations the next fall, and for that reason would not be advisable. If, for any reason, two kinds of member capital -- invested capital and individual book credits -- are not desirable, the board of directors might decide to convert the book credits into invested capital, provided that such a procedure was in accord with their bylaws. If this were done, the account showing the individual book credits would disappear from the statement, and invested capital would be increased from $10,000 to $13,000.

Had all the transactions suggested above been made as of the date of the balance sheet, it would have been changed as in the balance sheet on this page.

Transactions such as those illustrated above indicate that cash received or paid out is not always related to income. Cash funds may be received or paid out for a number of purposes without affecting the income. Moreover, many business transactions are made in which cash is neither received nor paid out; as examples, ginning may be done on credit; additional shares or other evidences of ownership may be issued in payment of dividends; purchases of material and supplies may be received either before or after payment is made for them; or a note may be given in payment for equipment purchased.

The full meaning of financial statements can not be explained or understood in terms of cash received and paid out. Business transactions are exchanges of values. These transactions are always measured in terms of dollars and cents but are not necessarily made in cash.

BALANCE SHEET
(Date)

| | | |
|---|---|---|
| ASSETS (owned by the co-op) | | |
| Cash | | $ 1,000 |
| Inventories | | 300 |
| Gin plant | | 22,000 |
| Prepaid expenses | | 200 |
| Total | | $23,500 |
| Liabilities and net worth | | |
| LIABILITIES (owed by the co-op) | | |
| Accrued expenses | $ 100 | |
| Notes payable | 10,000 | |
| Total | | $10,100 |
| NET WORTH (investment of members) | | |
| Invested capital | $13,000 | |
| General reserve or surplus | 400 | |
| Total | | $13,400 |
| Total liabilities and net worth | | $23,500 |

## LIMITATIONS OF BOOKKEEPING RECORDS

Bookkeeping is more exact in its procedure than accurate in its results. Every entry does exactly balance as between debits and credits. However, if the entry is, for example, that of recording the inventory on the books at the end of the year, it is based on some kind of physical count or inspection, and valued at some estimated price, neither of which may be absolutely accurate. Similarly, the correct amount to allow for depreciation is at best only an estimate. This estimate is included in the expenses and the net income, as well as in the book value of fixed assets. Prepaid items, likewise, are in part estimated. Nearly all liability accounts, however, may be accurately determined.

As good accounting procedure always favors a conservative policy, the value of assets as shown by the books should never ex-

ceed their value to the business as a going concern. Even under such conditions the assets would probably not sell for the amount at which carried on the books if sold at forced or auction sale. If the books show the value of the assets to be less than their value to the business as a going concern, net worth will be understated. On the other hand, if the books show too liberal a value for assets, net worth will be correspondingly overstated. In analyzing any balance sheet, the amount reported as net worth is significant only to the extent that the assets are accurately valued, and the liabilities correctly shown. Likewise, the net income as shown by the operating statement is significant only when the proper items have been correctly included.